

that of 1914. Since the snow is doubtless all gone by the middle of July, the run-off for the remaining portion of the season must come from the ground storage and precipitation. The latter for both August and September of both years was practically negligible; wherefore we conclude that the ground storage of the watershed was replenished by the rains of April and May, 1915.

Section Director Wells, in commenting upon the results of the survey, says:

From the foregoing it will be observed that not only was the total run-off much lighter in 1915 than in 1914, but the percentage of run-off as compared with the snow supply was much less in 1915 than in 1914, notwithstanding the fact that more rain fell during the season in 1915 than in the same period in 1914. This is probably due to several reasons:

First. The total loss by evaporation would be nearly or quite as great from a thin snow cover as from a heavier cover.

Second. The summer and fall of 1914 were abnormally dry, leaving a marked deficiency in the soil water, which had to be made up before the run-off could be materially increased.

Third. It is apparent that the summer rainfall has little effect in augmenting the flow of the streams, as compared with the winter snowfall. May, 1915, was an abnormally wet month, yet the run-off during that month was only a little more than half that for May, 1914.

During the season of 1915 the monthly discharge varied from 50 acre-feet in August to 1,130 acre-feet in May. In 1914 the monthly discharge varied from 73 acre-feet in August to 3,730 acre-feet in April.

MEAN LAKE LEVELS DURING NOVEMBER, 1915.

By UNITED STATES LAKE SURVEY.

[Dated: Detroit, Mich., December 2, 1915.]

The following data are reported in the Notice to Mariners of the above date:

Data.	Lakes.			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during November, 1915:				
Above mean sea level at New York.....	<i>Fect.</i> 602.89	<i>Fect.</i> 579.52	<i>Fect.</i> 571.46	<i>Fect.</i> 244.94
Above or below—				
Mean stage of October, 1915.....	+0.14	-0.29	-0.53	-0.23
Mean stage of November, 1914.....	+0.14	-0.36	-0.01	-0.31
Average stage for November, last 10 years.....	+0.42	-0.77	-0.35	-0.69
Highest recorded November stage.....	-0.62	-3.40	-2.21	-2.88
Lowest recorded November stage.....	+1.39	+0.34	+0.76	+1.53
Average relation ¹ of the November level to—				
October level.....	-0.2	-0.3	-0.3	-0.2
December level.....	+0.2	+0.2	+0.1	+0.1

¹ During last 10 years.